UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

# NOTICE OF ALLOWANCE AND FEE(S) DUE

21839 7590 10/01/2008 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404 EXAMINER
HUYNH, LOUIS K
ART UNIT PAPER NUMBER
3721

DATE MAILED: 10/01/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.			
10/575,723	04/13/2006	Hidetoshi Konno	1034185000077	1789			
TITLE OF INVENTION: PACKAGING FILLING APPARATUS AND TRANSVERSAL SEALING APPARATUS							

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	01/02/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used to correspondence including a below or directed oth tions.	for transmitting the ng the Patent, advan- nerwise in Block 1,	ISSUE FEE and a nce orders and noting by (a) specifying a	PUBLICATI fication of r a new corres	ON FEE (if requin naintenance fees wi pondence address;	ed). E II be : and/or	Hocks 1 through 5 st mailed to the current (b) indicating a sepa	nould be completed where correspondence address as trate "FEE ADDRESS" for	
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Feet	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.				
POST OFFICE I	7590 10/01 INGERSOLL & 3 3OX 1404 , VA 22313-1404			I be	Certi	ificate	of Mailing or Trans	mission g deposited with the United it class mail in an envelope above, or being facsimile ate indicated below.	
								(Depositor's name)	
								(Signature)	
								(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED	FIRST NAMED INVENTOR			RNEY DOCKET NO.	CONFIRMATION NO.	
10/575,723	04/13/2006		Hidetosh	i Konno		1	034185000077	1789	
TITLE OF INVENTION								_	
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE			PREV. PAID ISSUE FEE		TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1440	\$30	00	\$0		\$1740	01/02/2009	
EXAM	INER	ART UNIT	CLASS-SU	BCLASS					
HUYNH,		3721	053-55	1000					
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach ND RESIDENCE DATA	inge of Corresponde  "Indication form and. Use of a Custon A TO BE PRINTED	nce or agents ( (2) the nar registered 2 registere listed, no r	mes of up to DR, alternation me of a singlattorney or a d patent attoname will be (print or type	e firm (having as a a gent) and the name: meys or agents. If n printed.	attorn memb s of up o nam	er a 2 p to e is 3	ocument has been filed for	
(A) NAME OF ASSIC	GNEE		(B) RESIDE	NCE: (CITY	and STATE OR CO	DUNT	RY)	oup entity Government	
4a. The following fee(s) a  Issue Fee Publication Fee (N Advance Order - #	o small entity discount p	permitted)	A check i Payment The Direc	is enclosed. by credit car ctor is hereby	d. Form PTO-2038	is atta	required fee(s), any de		
	s SMALL ENTITY state	as. See 37 CFR 1.27					TITY status. Sec 37 Cl		
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if req records of the United Sta	uired) will not be ac ites Patent and Trade	cepted from anyone mark Office.	other than t	he applicant; a regist	tered a	ttorney or agent; or th	e assignee or other party in	
Authorized Signature					Date				
Typed or printed name					Registration No				
This collection of informan application. Confident submitting the completed this form and/or suggestit Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C tiality is governed by 35 I application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	CFR 1.311. The information of the U.S.C. 122 and 37 or U.S.P.To. Time will reden, should be sent D NOT SEND FEES	rmation is required to CFR 1.14. This coll I wary depending up to the Chief Inforn OR COMPLETED	to obtain or r lection is est son the indiv nation Office FORMS TO	etain a benefit by the imated to take 12 m idual case. Any con r, U.S. Patent and T O THIS ADDRESS.	e publ inutes nment raden SENI	ic which is to file (and to complete, includin s on the amount of tin hark Office, U.S. Depo O TO: Commissioner	by the USPTO to process) g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

OMB 0651-0033



# UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

DATE MAILED: 10/01/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,723	04/13/2006	Hidetoshi Konno	1034185000077	1789
21839 75	90 10/01/2008	EXAMINER		
BUCHANAN, IN	NGERSOLL & ROO	HUYNH, LOUIS K		
POST OFFICE BC		ART UNIT	PAPER NUMBER	
ALEXANDRIA, V	A 22313-1404	3721		

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 48 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 48 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

### Application No. Applicant(s) 10/575,723 KONNO ET AL. Notice of Allowability Examiner Art Unit Louis K. Huvnh 3721 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to the after final amendment filed 08/28/2008. The allowed claim(s) is/are 7,10,11 and 14. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) X All b) ☐ Some\* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. \( \overline{\text{Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other . /Louis K. Huynh/ Primary Examiner

Art Unit: 3721

Application/Control Number: 10/575,723 Page 2

Art Unit: 3721

#### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or
additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR
1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

The application has been amended as follows:

# In the Specification:

payment of the issue fee.

 The phrase --This application is a U.S. national stage entry of PCT/JP04/10718, filed 07/28/2004 -- has been inserted below the title.

#### Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

Applicant has successfully argued that the prior art in combination does not disclose and or teach a controller that controls the high-frequency oscillator based on the control signal from the control means, which control signal is transmitted based on a statistical relation between a plurality of different effect factors affecting quality of the transversal sealing and the quality of the transversal sealing (page 9 & 10 of the Remarks filed 08/28/2008). In particular, the prior art fails to disclose and/or teach a packaging apparatus that comprises, among other things, a transversal sealing apparatus comprising a high-frequency oscillator, a controller connected to the high-frequency oscillator, an inductor connected to the high-frequency oscillator and receiving output from the high-frequency oscillator

Application/Control Number: 10/575,723 Page 3

Art Unit: 3721

to generate a magnetic field in the packaging material, and a sealing quality control means transmitting a control signal to the controller based on a statistical relation between a plurality of different effect factors affecting quality of the transversal sealing and the quality of the transversal sealing, wherein:

- the controller controls the high-frequency oscillator based on the control signal from the sealing quality control means; and
- the effect factors affecting the quality of the transversal sealing comprise
  effect factors A which include a moisture percentage contained in the
  web-like packaging material, with or without a laminated metal
  evaporated film, temperature of the fluid product filled therein,
  characteristics of the sealing thermoplastic layer of the web-like packaging
  material and thickness of the conductive layer, as well as effect factors B
  which include an amount of energy output from the high-frequency
  oscillator and output impedance from the high-frequency oscillator.
- 4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."
- Any inquiry concerning this communication or earlier communications from the
  examiner should be directed to Louis K. Huynh whose telephone number is 571-272-4462. The
  examiner can normally be reached on M-F from 8:00AM to 3:00PM.

Application/Control Number: 10/575,723 Page 4

Art Unit: 3721

 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on 571-272-4467. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you

would like assistance from a USPTO Customer Service Representative or access to the

automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Louis K. Huynh/ Primary Examiner Art Unit 3721

September 23, 2008